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(54) **METHOD AND APPARATUS FOR LASER
DICING OF WAFERS**

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See application file for complete search history.

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(57) **ABSTRACT**

A method includes cutting a semiconductor wafer on a
substrate wafer using at least one laser. By setting the laser
to a set of parameters that define a laser beam, the laser beam
can avoid ablation of the substrate wafer. The laser beam is
also set equal to, or within, an ablation threshold of the
semiconductor wafer for selectively ablating the semicon-
ductor wafer. The set of parameters includes wavelength,
pulse width and pulse frequency.

23 Claims, 5 Drawing Sheets

